

CLAIMS

1. A method of operating a projection-type system configured to pass light emitted from a high-pressure discharge lamp lit by d.c. lighting through divided plural color segments of a color filter sequentially to project an image onto a screen, characterized by superimposing a pulse current on a d.c. lamp current in synchronism with at least one specific color segment.
- 10 2. A projection-type system for projecting an image onto a screen by passing light emitted from a high-pressure discharge lamp lit by d.c. lighting through divided plural color segments of a color filter sequentially, characterized by comprising the high-pressure discharge lamp, and d.c. lighting means for lighting the high-pressure discharge lamp by feeding a d.c. lamp current to the high-pressure discharge lamp while superimposing a pulse current on the d.c. lamp current periodically, the pulse current being superimposed in synchronism with at least one specific color segment.
- 15 3. The projection-type system and the method of operating the same according to claim 1 or 2, wherein the color filter comprises a rotatable color wheel divided into divided segments on a color basis.
- 20 4. The projection-type system and the method of operating the same according to any one of claims 1 to 3, wherein: the color filter comprises divided four color

segments which are colored red, green, blue and white, respectively; and the pulse current is superimposed within confines of the white segment.

5 5. The projection-type system and the method of
operating the same according to any one of claims 1 to 3,
wherein: the color filter comprises divided three color
segments which are colored red, green and blue, respectively;
and the pulse current is superimposed within confines of the
red segment.

10 6. The projection-type system and the method of
operating the same according to any one of claims 1 to 5,
wherein a pulse superimposing power fed to the high-pressure
discharge lamp is not less than 1% of a rated power of the
high-pressure discharge lamp.

15 7. The projection-type system and the method of
operating the same according to any one of claims 1 to 6,
wherein: a pulse repetition period (ts) of the pulse current
(P) is determined to fall within a range from 0.2 msec to 20
msec; a ratio (Ip/Io) of a mean pulse height (Ip) of the pulse
20 current (P) to a mean current value (Io) of the lamp current
is determined to fall within a range from 0.1 to 2; and a
ratio (tp/ts) of an effective pulse width (tp) of the pulse
current (P) to the pulse repetition period (ts) of the pulse
current (P) is determined to fall within a range from 0.005 to
25 0.5.